

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: SOMERVILLE, Robin B.; FAN, Liang-Tseng

SERIAL NO.: 10/089,896

ART UNIT: 1764

FILED: July 16, 2002

EXAMINER: Johnson, J.D.

TITLE: PROCESS FOR MODIFYING COAL SO AS TO REDUCE SULFUR EMISSIONS

AMENDMENT "C"

Director of the U.S. Patent  
and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action of June 15, 2005, a response being due with a two month extension of time by November 15, 2005, please consider the following remarks:

REMARKS

Upon entry of the present amendments, previous Claims 40- 58 have been canceled and new Claims 59 -74 substituted therefor. Reconsideration of the rejections, in light of the forgoing amendments and present remarks, is respectfully requested. The present amendments have been entered for the purpose of correcting the "new matter" objection by the Examiner and also more clearly reciting the nature of the present invention. The present amendments have also been entered for the purposes of placing the application into proper condition for appeal.

In the Office Action, it was indicated that Claims 40 - 58 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, the Examiner has contended that the claims contain subject matter which was not described in the specification. In particular, the Examiner has objections to the use of the term “agglomerating”, the “enclosed” vessel, “immediately injecting the dried agglomeration into a combustion chamber” and the “without binders added thereto”. The Examiner also has objections to Claim 56 and 57 under 35 U.S.C. §112, second paragraph, as being indefinite.

As an overview to the present reply, Applicant has revised the original claim language in the form of new Claims 59 - 74. In particular, new independent Claim 59 has removed the term “agglomerating” and has recited the previous term “blending”. It is indicated that the coal powder is blended with “fresh hydrated lime”. As stated in the previous Amendment “B”, such “fresh hydrated lime” will have a moisture content of no more than five percent by weight by definition. The term “enclosed vessel” has been replaced with “vessel”. Additionally, and furthermore, it is recited that this blending action serves to “spontaneously form pellets of coal and fresh hydrated lime”. Instead of the term “agglomeration” throughout the remainder of independent Claim 59, the term “pellets” has been substituted therefor. Additionally, Applicant has removed the term “immediately” from independent Claim 59 with respect to the injecting of the dry pellets into a combustion chamber. On this basis, Applicant contends that independent Claim 59 should properly describe the present invention with proper support from the specification.

Dependent Claims 60 and 61 reflect the limitations of previous dependent Claims 41 and 42. Dependent Claim 62 reflects the limitations of previous dependent Claim 43 and has removed the term “without binders added thereto”. Dependent Claims 63 - 71 reflect the limitations found in

previous dependent Claims 44 - 52, respectively. It is important to note that in new dependent Claim 65, language has been added so as to substitute the term “pellets” for “agglomeration” and also so as to remove the portion reciting “so as to form an intimate agglomeration”. The terminology “such that the pellets become an intimately mingled mixture” has been substituted for such language. In dependent Claim 67, the term “pellets” has been substituted for the term “agglomeration”. The term “enclosed vessel” has been substituted with “vessel”.

Independent Claim 72 reflects the limitations of previous independent Claim 53. However, the phrase “being free of binders of materials other than fresh hydrated lime” has been removed. The term “blending” has been substituted for the previous term “agglomerated”. The definition of fresh hydrated lime with a moisture content of five percent or less has been provided in independent Claim 72. Throughout the remainder of the claim, the term “pellets” has been substituted for the term “agglomeration”. Additionally, and furthermore, independent Claim 72 recites that the steps of grinding and blending “spontaneously form the pellets”. Dependent Claims 73 and 74 reflect the limitations of previous dependent Claim 54 and 55. Applicant has canceled Claims 56 - 58 in view of the Examiner’s objections.


It is not clear in the Official Action whether the prior art Smith patent still pertains to the rejections of the now-amended claims. Applicant herein repeats its arguments with respect to any rejections based upon the Smith patent. Most importantly, it noted that the Smith patent does not describe the use of “fresh hydrated lime” or hydrated lime having a moisture content of five percent or less. Such arguments found in previous Amendment “B” are incorporated by reference herein.

Based upon the foregoing analysis, Applicant contends that independent Claims 59 and 72 are now in proper condition for allowance. Additionally, those claims which are dependent upon these independent claims should also be in condition for allowance. Reconsideration of the rejections and allowance of the claims at an early date is earnestly solicited. Since no new claims have been added above those originally paid for, no additional fee is required.

Respectfully submitted,

Date

11-15-05

  
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